

CLAIMS

1. A safety catheter (1) comprising:

- a catheter body (10) having an axial channel (11) communicating with a sheath or cannula (20) for administration of fluids,

- a guide needle (3) insertable through the channel (11) of the catheter body, into the sheath (20) to guide it during insertion into the patient's body, and

- a guide needle body (30) supporting said guide needle (3), insertable inside the catheter body (10) and provided with at least one seat (35) for coupling with medical instruments, characterised in that

said body (30) of the guide needle is mounted slidably inside the catheter body (10) to be able to slide from a forward working position wherein the guide needle (3) protrudes forward from the catheter body to a retracted safety position wherein the guide needle (3) is protected inside the catheter body (10), there being provided locking means (40) disposed in said body (30) of the guide needle, cooperating with complementary locking or stop means (14, 15, 16) disposed in the catheter body (10), to lock the body (30) of the guide needle respectively in said forward working position and in said retracted safety position.

2. A safety catheter (1) according to claim 1, characterised in that said locking means provided in the guide needle body (30) comprise a pin (40) and said complementary locking means provided in the catheter body (10) comprise two seats (14, 15) disposed at the front and at the rear in the catheter body to receive said pin (40) when the body (30) of the guide needle is situated respectively in said forward working position and in said retracted safety position.

25 3. A safety catheter (1) according to claim 2, characterised in that said pin (40) is mounted on an elastic element (36) connected to the guide needle body (10), so as to be able to be squeezed manually by the operator, causing elastic yielding of said elastic element (36), to disengage itself from said front seat (14) of the catheter body, when the guide needle body (30) is in said forward working position.

30 4. A safety catheter (1) according to claim 3, characterised in that said elastic element (36) supporting the pin (40) consists of an elastic tongue (36) defined by a substantially U-shaped cut (37) in said guide needle body (30) and disposed in a longitudinal seat (38)

formed in the guide needle body (30), so as to be able to bend in said longitudinal seat (38).

5. A safety catheter (1) according to any one of the preceding claims, characterised in that it comprises guide means (13) able to guide the axial sliding of said guide needle body (30) inside said catheter body (10).

10. 6. A safety catheter (1) according to claim 5, characterised in that said guide means comprise a longitudinal slot (13) formed in the catheter body (10) and ending in said front (14) and rear (15) seats to allow guided sliding of said pin (40) in said longitudinal slot (13).

15. 7. A safety catheter (1) according to claim 6, characterised in that said front and rear seats (14, 15) are substantially circular in shape with a slightly larger diameter than the width of said longitudinal slot (13), and

15. said pin (40) comprises a cylindrical base part (41) having a larger diameter than the upper cylindrical part (42),
the diameter of said base part (41) of the pin being slightly smaller than the diameter of said front and rear seats (14, 15) and slightly greater than the width of said longitudinal slot (13), and

20. the diameter of said top part (42) of the pin being slightly smaller than the width of said longitudinal slot (13).

25. 8. A safety catheter (1) according to any one of the preceding claims, characterised in that said complementary locking or stop means (16) disposed in the body (10) of the catheter further comprise a longitudinal elastic tongue (16) disposed in the rear part of the catheter body (10), said longitudinal elastic tongue (16) being defined by a substantially U-shaped cut (17) formed in the catheter body and having a free end (18) protruding inward to abut against an abutment surface (33) formed in the front part of the body (30) of the guide needle, when the guide needle body is in its retracted safety position.

30. 9. A safety catheter (1) according to any one of the preceding claims, characterised in that it comprises spring means (5) disposed in the catheter body (10) between an abutment surface (19) provided in the front wall of the guide needle body (30), said spring means (5) being under compression, when the guide needle body (30) is in said

forward working position and being released when the guide needle body (30) is in the retracted safety position.

5 10. A safety catheter (1) according to claim 9, characterised in that said spring means comprise a spiral spring (5) disposed around a cylindrical tang (31) disposed in front of said guide needle body (30), so as to define said abutment surface (33) of the guide needle body and having a smaller diameter than the guide needle body.